

# Recombinant human Peroxiredoxin 1/PRDX1 protein

Catalog Number: PRX0801

## PRODUCT INFORMATION

---

### Expression system

E.coli

### Domain

1-199aa

### UniProt No.

Q06830

### NCBI Accession No.

NP\_002565.1

### Alternative Names

Natural killer cell-enhancing factor A, NKEF-A, Proliferation-associated gene protein, PAG, Thioredoxin peroxidase 2, Thioredoxin-dependent peroxide reductase 2, Thioredoxin-dependent peroxiredoxin 1, PAGA, PAGB, TDPX2

## PRODUCT SPECIFICATION

---

### Molecular Weight

24 kDa (219aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 7.5) containing 20% glycerol

### Purity

> 90% by SDS-PAGE

### Biological Activity

Specific activity is >2,000pmol/min/ug. Enzymatic activity is defined as the amount of hydroperoxide that 1ug of enzyme can reduce at 25C for minute.

### Tag

His-Tag

### Application

SDS-PAGE, Enzyme Activity

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

---

### Description

PRDX1 is a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. This protein is also known to be important to protect red blood cells against reactive

# Recombinant human Peroxiredoxin 1/PRDX1 protein

Catalog Number: PRX0801

oxygen species and in tumor prevention. Recombinant human PRDX1, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by conventional chromatography techniques.

## Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH> MSSGNAKIGH PPNFKATAV MPDGQFKDIS LSDYKGKYVV FFFYPLDFTF VCPTEIIAFS  
DRAEEFKKLN CQVIGASVDS HFCHLAWVNT PPKQGGLGPM NIPLVSDPKR TIAQDYGVLK ADEGISFRGL FIIDDKGILR  
QITVNDLPVG RSVDETLRLV QAFQFTDKHG EVCAPAGWKPG SDTIKPDVQK SKEYFSKQK

## General References

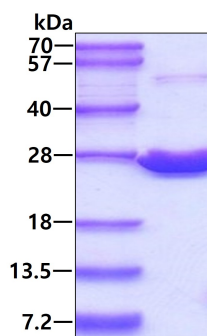
Iraqi I., et al. (2008) *Cancer Res.* 68(4):1055-63.

Parmigiani RB., et al. (2008) *Proc Natl Acad Sci U S A.* 105(28):9633-8.

Kim JH., et al. (2008) *Clin Cancer Res.* 14(8):2326-33.

## DATA

### SDS-PAGE



3 $\mu$ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.